

Chart of the Week #2024-06

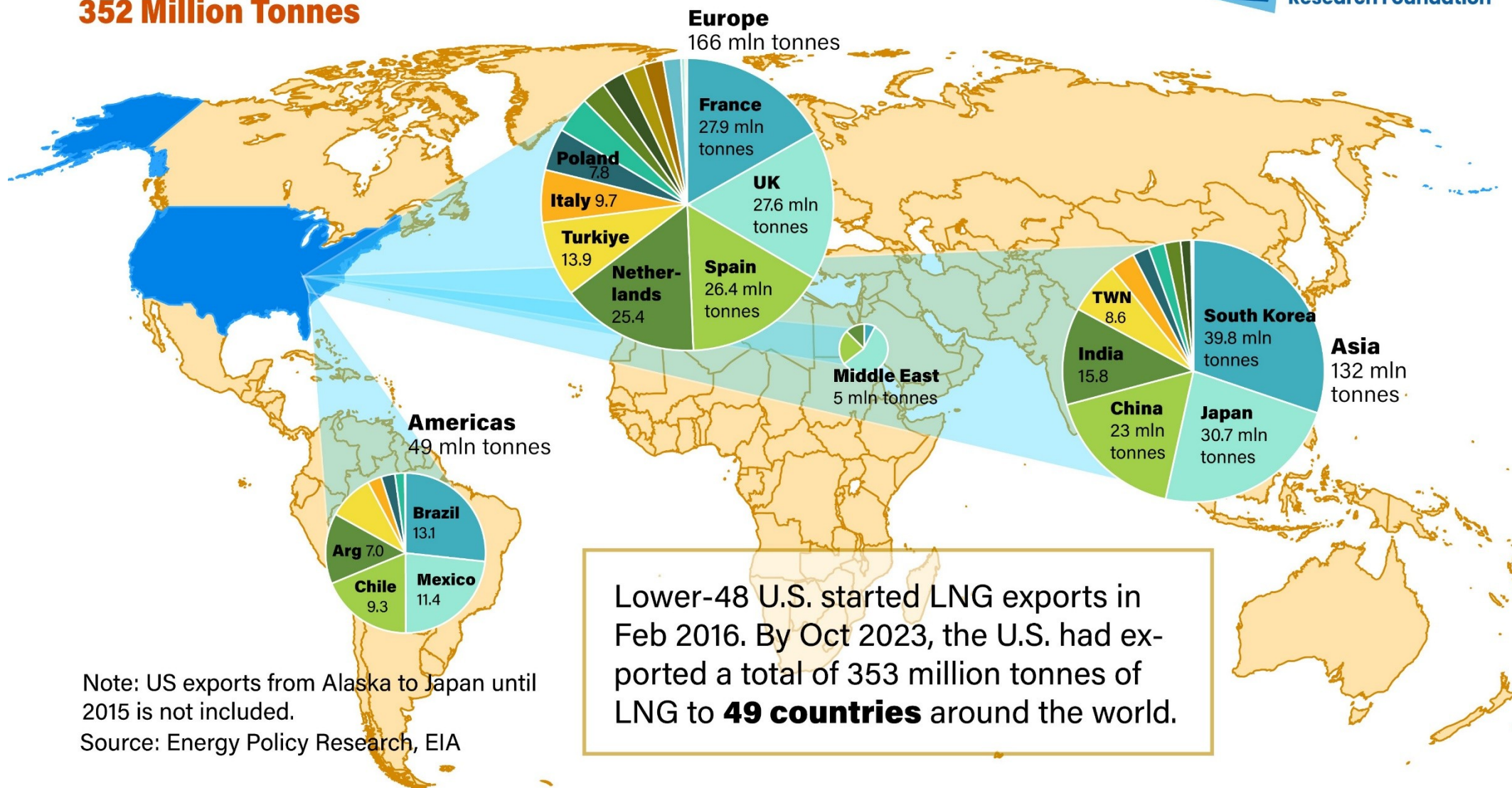
U.S. LNG Revisited



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Washington, DC**

Cumulative US LNG Exports (Vessel) by Destination (Feb 2016-Oct 2023)

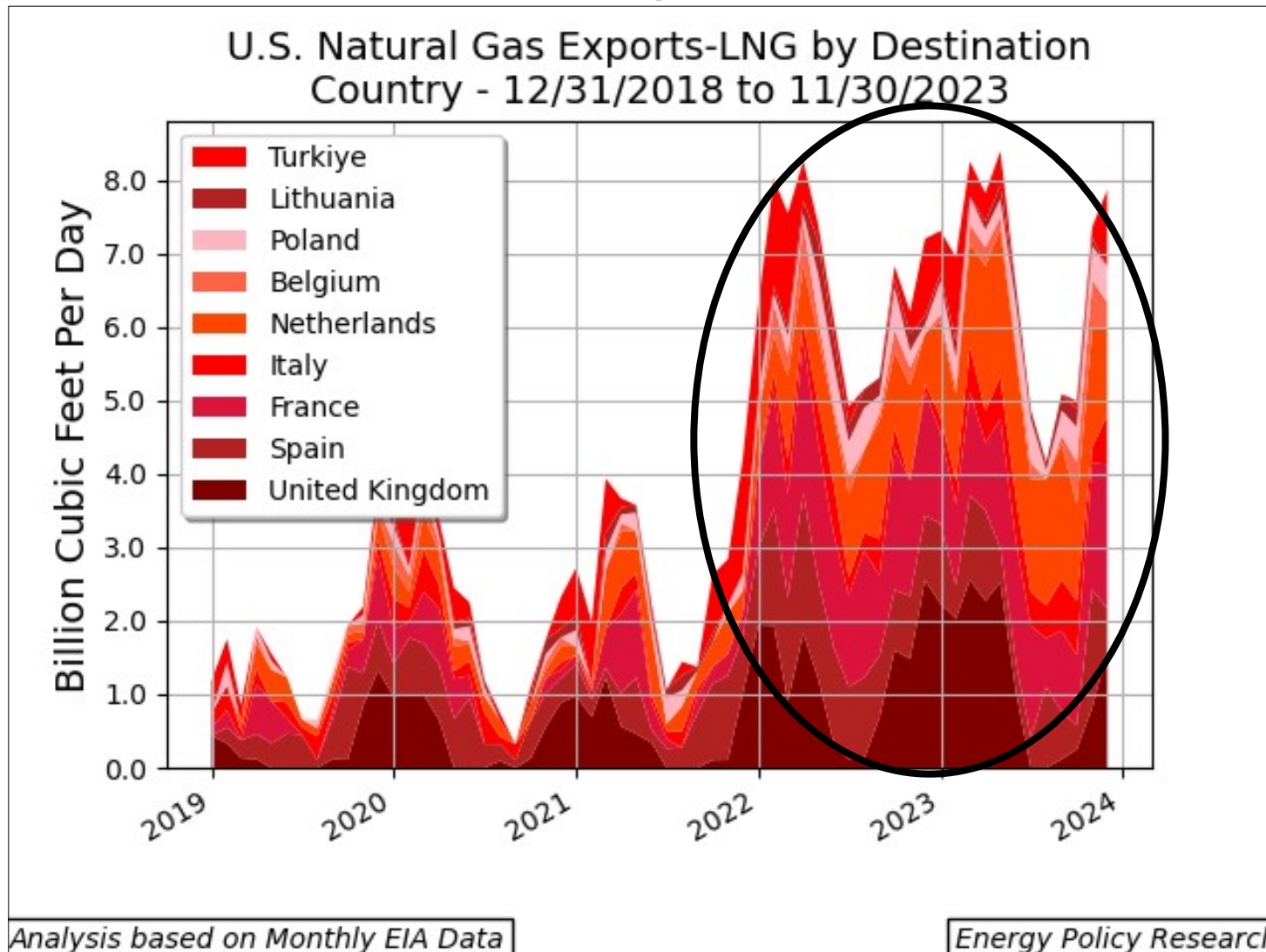
352 Million Tonnes



Note: US exports from Alaska to Japan until 2015 is not included.

Source: Energy Policy Research, EIA

European Receipts of U.S. LNG Exports by Destination



In early 2021 Russia began engaging in strategic export reduction of its pipelined natural gas.

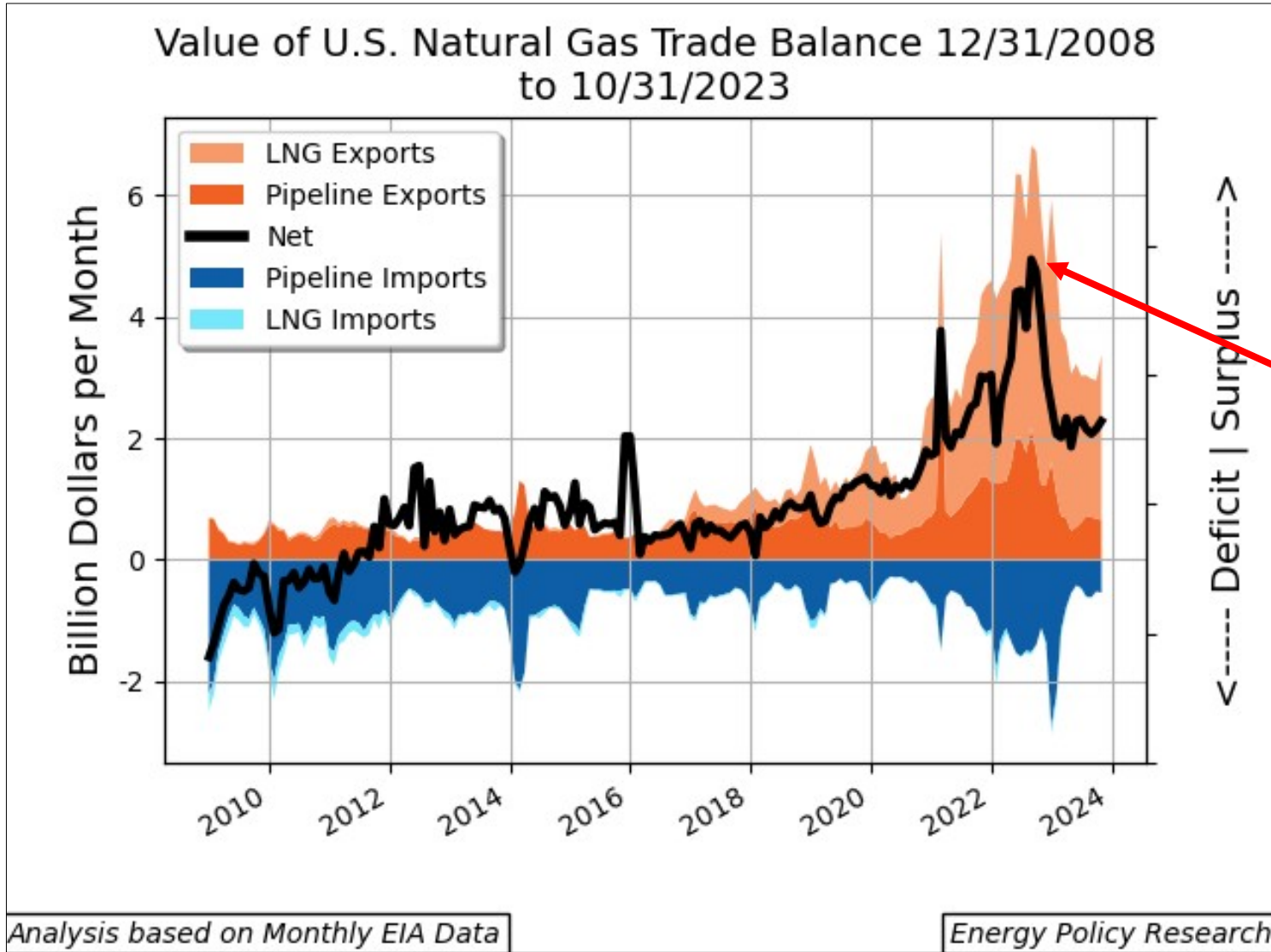
Through a series of reciprocating steps culminating in the severe curtailment of pipeline flows through all transit capacity available to Russia, Europe's imports of Russian natural gas were less than 1 BCF/d (billion cubic feet per day) by the summer of 2022, down from a high of 15 BCF/d in 2019.

In response to this degradation of Russian natural gas supplies, Europe ramped up its natural gas imports from other sources, especially U.S. LNG.

European U.S. LNG imports increased from 2 BCF/d to almost 8 BCF/d, or 50%, of Europe's LNG requirements beginning in January 2022.

This level of European-bound U.S. LNG imports has continued.

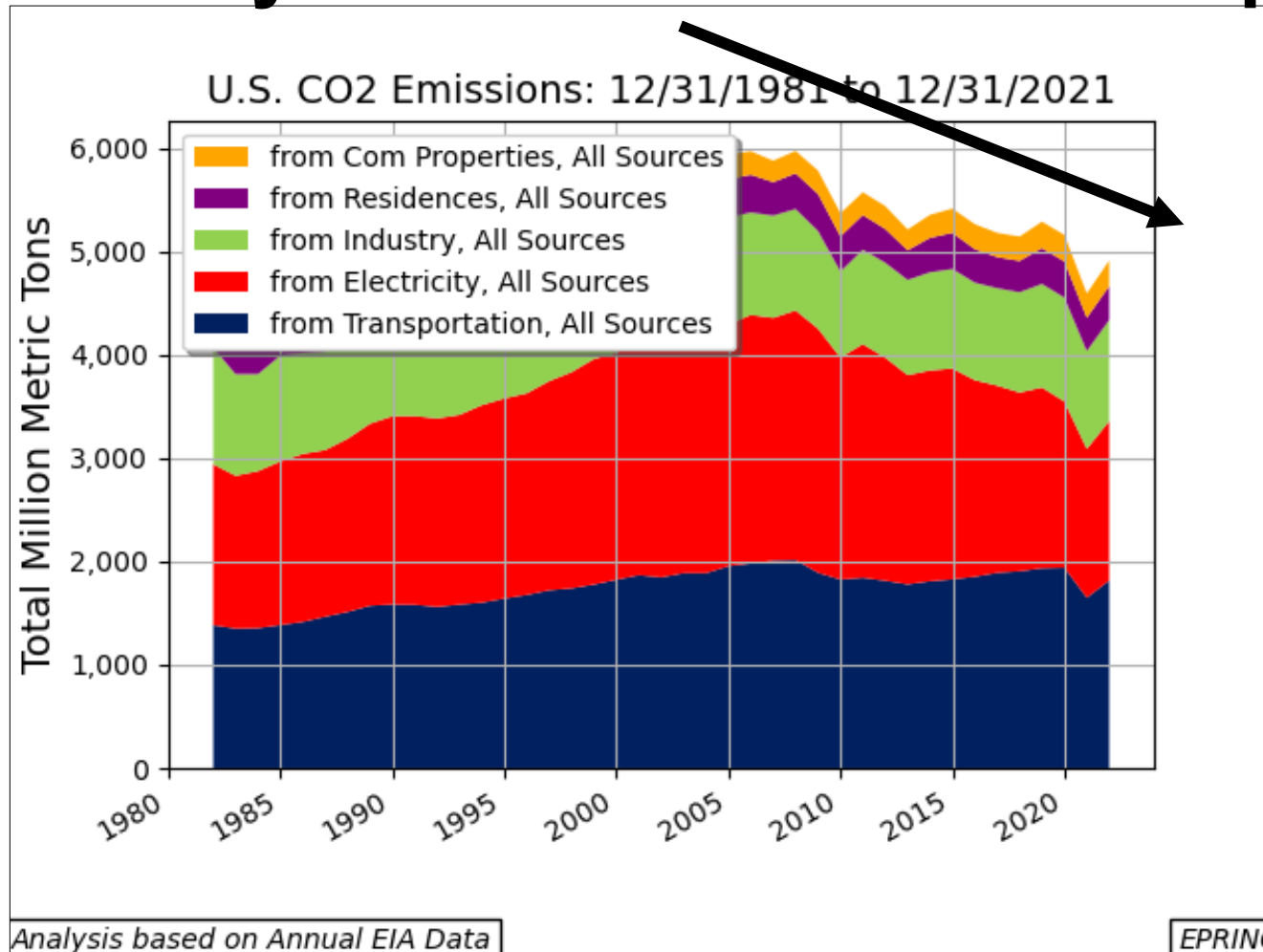
Natural Gas Trade Lowers U.S. Trade Deficit



At the August 2022 peak, trade deficit was \$67B (\$261B exports, \$328B imports). U.S. LNG exports in that month was \$4.95B.

Without LNG trade, the August 2022 deficit would have been \$72B, or 7.5% higher.

U.S. CO₂ Emissions from Hydrocarbon Fuel Consumption



U.S. CO₂ emissions plateaued at 6 billion metric tons from 2004 to 2007 and have declined since then.

CO₂ emissions from hydrocarbon fuel consumption as projected by the U.S. Energy Information Administration (EIA) for 2024 are expected to be 4.75 billion metric tons, a decrease of over 20% since their peak.

Critical to this decline has been the displacement of coal-powered electricity generation by natural gas. From 2005 to 2021, coal-fired generation declined to a total 900 hundred million megawatt hours, an annual rate of almost 5%.

During the same period, natural gas-fired generation grew to 1,580 hundred million megawatt hours at an annual rate of 4.7%

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- This slide deck is available at: <https://eprinc.org/chart-of-the-week/>
- For more information on these charts, please contact Batt Odgerel (batto@eprinc.org), Max Pyziur (maxp@eprinc.org), or Lucian Pugliaresi (loup@eprinc.org).